

Claims

1. An optical storage medium inspection apparatus comprising:
 - an optical pickup head that emits a light beam to an optical storage medium, detects a light beam reflected from the optical storage medium, and outputs a signal based on the received reflected light;
 - a jitter measuring unit for measuring jitter in signals output from the optical pickup head; and
 - an evaluation unit for determining from the measured jitter if the optical storage medium is good or defective;
- 10 wherein the jitter measuring unit measures jitter in a train of 3T or longer marks or spaces from an optical storage medium to which digital information is recorded as a train of marks or spaces of length kT based on a period T and an integer k of two or more.
2. An optical storage medium inspection apparatus comprising:
 - an optical pickup head that emits a light beam to an optical storage medium, detects a light beam reflected from the optical storage medium, and outputs a signal based on the received reflected light;
 - a jitter measuring unit for measuring jitter in signals output from the optical pickup head; and
 - 15 an evaluation unit for determining from the measured jitter if the optical storage medium is good or defective;
 - 20 wherein the jitter measuring unit measures jitter from an optical storage medium to which digital information is recorded as a train of marks or spaces of length kT based on a period T and an integer k of two or more, but does not measure jitter in signals obtained from edges of marks or spaces of length $2T$.

3. An optical storage medium inspection apparatus according to claim 2, characterized by the jitter measuring unit measuring jitter from an optical storage medium on which the width of 2T-long marks is narrower than the width of marks longer than 2T.
5. An optical storage medium inspection apparatus according to claim 2, characterized by $I_{2pp}/I_{8pp} < 0.2$ where I_{2pp} is a signal reproduced from a pattern repeatedly recording 2T-long digital data marks and spaces and I_{8pp} is a signal reproduced from a pattern repeatedly recording 8T-long digital data marks and spaces.
10. An optical storage medium inspection apparatus according to claims 2, characterized by $ML < \lambda/(1.25 * NA)$ where ML is the length of a pair of digital data marks and spaces of length 2T, λ is the wavelength of the light beam emitted from the optical pickup head, and NA is the numeric aperture of the collector optics of the optical pickup head.
15. An optical storage medium inspection apparatus according to claim 1, wherein the jitter measuring unit measures jitter from an optical storage medium having a first recording layer formed from a semi-transparent film that passes part of light incident thereon and a second recording layer, and wherein the jitter measuring unit measures jitter in a signal obtained from the second recording layer when the part of the light reaches the second recording layer through the first recording layer.
20. An optical storage medium inspection apparatus according to claim 1, further comprising a gain adjustment means for reducing variation in the amplitude of signals input to a demodulation means when reflectivity of the optical storage medium varies.
25. An optical storage medium inspection apparatus according to claim 1,

8. An optical storage medium inspection method for determining if an optical storage medium is good or defective, said method comprising:

emitting a light beam from an optical pickup head to the optical storage medium to which digital information is recorded as a train of marks or spaces of

5 length kT based on a period T and an integer k ;

receiving light reflected by a mark or space;

measuring jitter in signals based on the reflected light, but not measuring jitter in signals obtained from edges of the shortest marks or spaces; and

10 determining from the measured jitter whether the optical storage medium is good or defective.

9. An optical storage medium inspection method according to claim 8, wherein the marks or spaces of the shortest length are marks or spaces of length

2T.